



Solar Photovoltaic Case Study

Brown Conservation Learning Center/Zoo School 1100 South Randolph Way

TECHNICAL SPECIFICATIONS:

- Installed February 2008.
- 14 kW DC; 11.2 kW AC.
- 3 Sunny Boy 6000 watt inverters.
- 81 Solarworld 175 watt photovoltaic modules comprise the system.
- Greenhouse gas reductions approximately 20.5 equivalent tons CO₂/year.



PROJECT DESCRIPTION:

- LEED Platinum facility located in central Tucson at Reid Park Zoo.
- The facility combines natural day lighting, green building materials and water harvesting with solar electricity generation and solar water heating.
- System provides over 3/4 of the total energy requirements of the building.
- Approximate annual energy production - 24,160 kWh.
- System production viewable on Sunny Portal's website at <http://tiny.cc/Zo7Ux>.

FINANCIAL DETAILS:

- Donation from Tucson Electric Power valued at \$75,000 included panels, inverters, a meter and some mounting equipment.
- Total cost including design and installation and excluding TEP donation - \$21,700.
- Cost savings of approximately \$980 expected annually.



- For additional information go to: <http://www.tucsonaz.gov/energy/>